

8.1 Technical data

Alfa Laval ref. 561687, rev. 0

Units according to ISO Standard.

The manufacturer reserves the right to change specifications without notice.

Product number	881099-03-01	
Separator type	MMPX 403SGP-11	
Purpose	<ul style="list-style-type: none"> – Continuous purification of fuel oil or lubricating oil from solid particles and water. – Continuous clarification (as option) of fuel oil or lubricating oil from solid particles. <p>The flash point of the oil to be separated must be >60 °C.</p>	
Hydraulic capacity	Maximum 1,7 m ³ /h	
Maximum density	feed	1100 kg/m ³
	sediment	2631 kg/m ³
Operating liquid	Max. density 1000 kg/m ³	See also “8.5 Water quality” on page 157.
	Min. pressure 150 kPa	
Feed temperature	Minimum 0 °C Maximum +100 °C	
Ambient temperature	Minimum +5 °C Maximum +55 °C	
Motor	2-pole 2,2 kW standard motor for 3-phase 50 or 60 Hz. Direct on-line start. Y/D-start: maximum 5 seconds in Y position.	
Power consumption	idling	0,8 kW
	running (at max. capacity)	1,8kW
	max. power consumption	2,8 kW (at starting-up)
Speed	The prescribed speed of the bowl spindle is stamped on the name plate of the machine. The speed must not be exceeded. Gear ratio (pulleys): 130:41 (50 Hz), 106:41 (60 Hz)	

<i>Maximum speed of rotation, rpm</i>	<i>50 Hz</i>	<i>60 Hz</i>
Motor shaft	3000	3600
Bowl	9510	9305

Starting time	1,8 - 2,3 minutes	
Stopping time	Running down: without brake	min. 13, max. 15 minutes
	with brake	min. 3, max. 4 minutes
Maximum running time without flow	Empty bowl	180 minutes
	Filled bowl	180 minutes
Sediment space	0,6 litres	
Discharge volume	1 litre (nominal), fixed	
Discharge interval	Minimum 2 minutes,	
Required water quality	See "8.5 Water quality" on page 157	
Lubrication	See "8.6 Lubricants" on page 158	
Lubricating oil volume	0,5 litre	
Sound pressure level	69 dB(A)	
Vibration level	Separator in use max.	9 mm/s (RMS)
Weight	Separator without motor	Net weight approx. 210 kg
	Motor	See "8.7.2 Electric motor" on page 168
	Complete bowl	Approx. 35 kg
	Overhead hoist for 300 kp is required	
Shipping data	According to "Basic equipment"	
	Weight	Net 235 kg, gross 285 kg
	Volume	1,06 m ³

Materials	Bowl spindle	stainless steel
	Frame, lower and upper parts	cast iron ("Centriblue" finish ¹⁾)
	Frame hood	silumin (grey finish ¹⁾)
	Bowl body and hood, disc stack, gravity discs	stainless steel
	Other bowl parts	brass
	Oil paring disc	brass
	Other inlet and outlet parts	stainless steel, brass, cast iron

¹⁾An epoxy enamel

NOTE

The separator is a component operating in an integrated system including a monitoring system. If the technical data in the system description does not agree with the technical data in this instruction manual, the data in the system description is the valid one.

8.2 Connection list

Alfa Laval ref. 561658, rev. 0

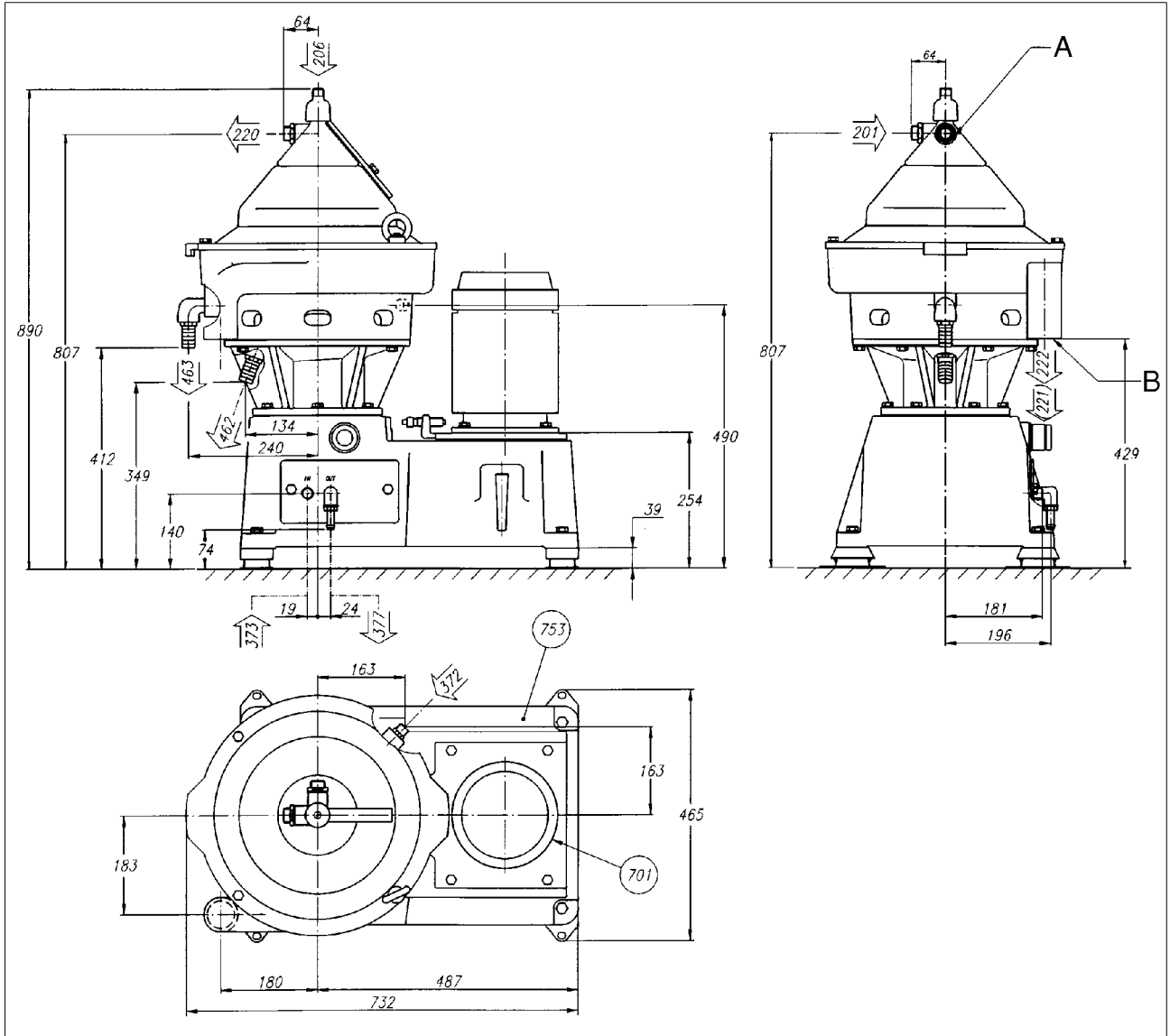
Connection No.	Description	Requirements/limits
201	Inlet for process liquid Allowed temperature	Maximum +100 °C minimum 0 °C
206	Inlet for liquid seal and displacement liquid - Quality requirements - Instantaneous flow - Pressure	Fresh water 5,5 litres/minute 150-600 kPa
220	Outlet for light phase (oil) - Counter pressure	Maximum 360 kPa
221	Outlet for heavy phase (water)	No counter pressure
222	Outlet for solid phase	The outlet after the separator should be installed in such a way that you can not fill the frame top part with sludge. (Guidance of sludge pump or open outlet)
372	Inlet for discharge liquid - Instantaneous flow - Quality requirements - Pressure - Time	18 litres/minute See "8.5 Water quality" on page 157 150-600 kPa 1 second per discharge

Connection No.	Description	Requirements/limits
373	Inlet for closing liquid - Instantaneous flow - Quality requirements - Pressure - Consumption	0,9 litre per minute See "8.5 Water quality" on page 157 150-600 kPa 0,9 litre per discharge
377	Outlet for operating liquid	
462	Drain of frame top part, lower	
463	Drain of frame top part, upper	
701	Motor for separator Allowed deviation from nominal frequency (momentarily during maximum 5 seconds)	 $\pm 5\%$ ($\pm 10\%$)
753	Unbalance sensors, vibration - Type - Vibration measurement range - Switch rating, resistive load max - Reset coil power supply max 14 W	See interface description Mechanical switch 0 to 4,5 g from 0 to 300 Hz 5 A 12 V DC 2 A 24 V DC 1 A 48 V DC 0,5 A 120 V DC 7 A 460 V AC 50/60 Hz 48 V DC

Location of connections on the separator, see "8.3 Basic size drawing" on page 152, and "8.3.1 Dimensions of connections" on page 153.


8.3 Basic size drawing


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Connections 201 and 220 are turnable

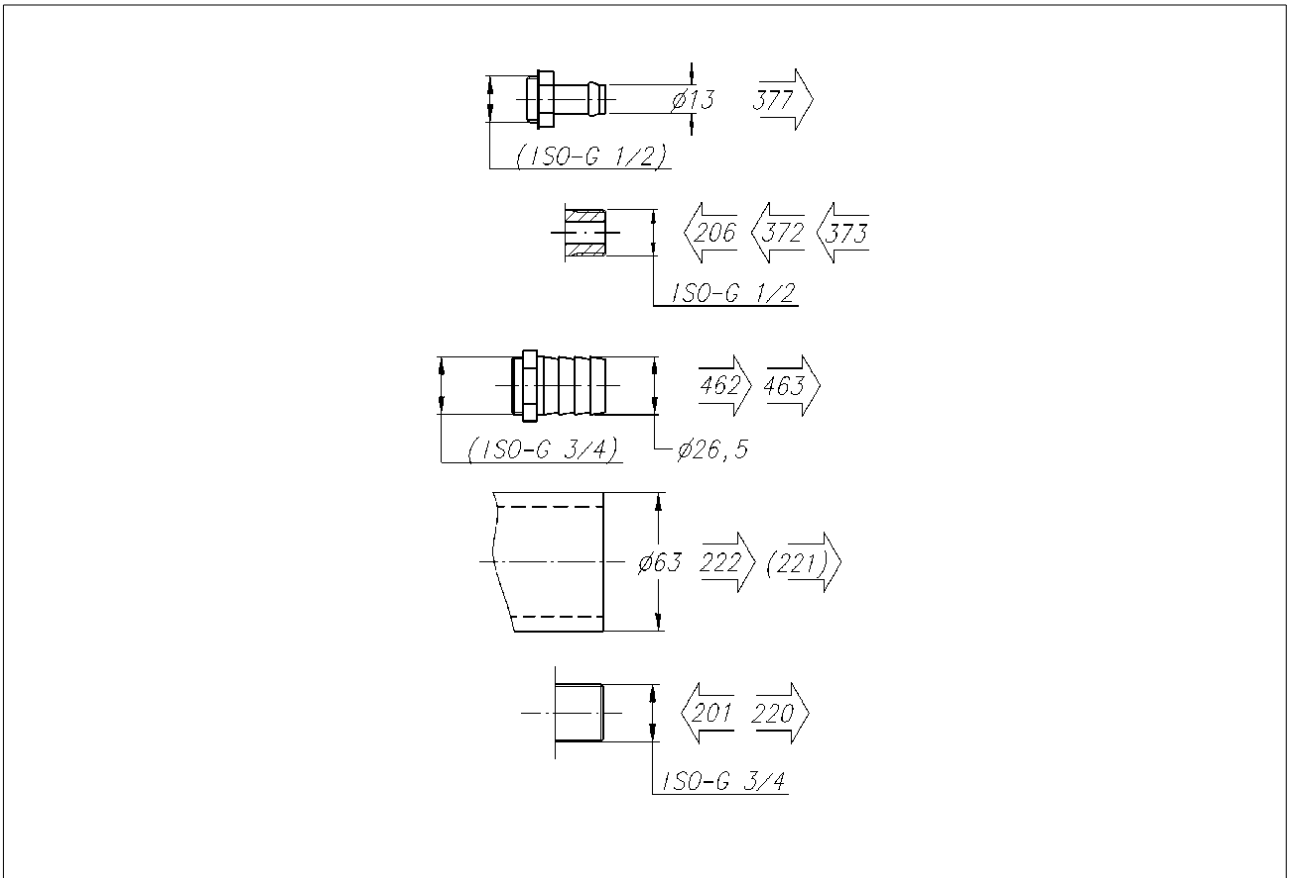
- A. Maximum horizontal displacement during operation ± 20 mm
- B. Maximum vertical displacement during operation ± 10 ..

 Vertical force not exceeding 5 kN/foot

 Horizontal force not exceeding 7 kN/foot

8.3.1 Dimensions of connections

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Data for connections see
"8.2 Connection list" on page 150

All connections to be installed non-loaded
and flexible